) INTERNATIONAL APPL TON FUBLISHED UNDER THE TATEN



(19) World Intellectual Property Organization International Bureau

(43) International Publication Date 23 October 2003 (23.10.2003)

PCT

(10) International Publication Number WO 03/088568 A2

(51) International Patent Classification7: H04L 12/00

(21) International Application Number: PCT/US03/10400

(22) International Filing Date: 4 April 2003 (04.04.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/371,983

12 April 2002 (12.04.2002) US

(71) Applicant (for all designated States except US): THOM-SON LICENSING S.A. [FR/FR]; 46, quai A. Le Gallo, F-92648 Boulogne (FR).

(72) Inventor; and

(75) Inventor/Applicant (for US only): PERDUE, Kenneth, Lee [US/US]; 1417 Carey Court, Carmel, IN 46032 (US).

(74) Agents: TRIPOLI, Joseph, S. et al.; c/o Thomson Licensing Inc., Two Independence Way, Suite #2, Princeton, NJ 08540 (US).

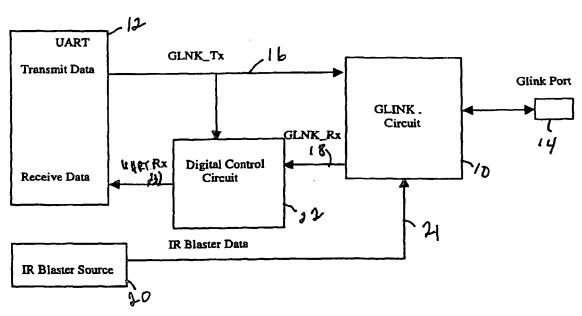
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CONTROL CIRCUIT



(57) Abstract: A digital control circuit enables/disables the feedback of serial transmissions of an UART receive signal when the G-LINK output port is short circuited in a particular operational mode. In a conventional operational mode, the digital control circuit monitors the state of the UART's Tx output and during an UART transmission, the Rx line normally is used for data feedback to set to a high state and eliminate unnecessary or unwarranted UART interrupts generated by the G-LINK circuit. The digital control circuit thus enables the G-LINK signal feedback to the UART when required, thereby maintaining a functionality to identify the unit's operational mode and allows the serial ports of the G-LINK to be configured and utilized during conventional operational modes.

WO 03/088568 A2



(19) World Intellectual Property Organization International Bureau



| (010) | 100100 | 100101 | 1000 | 1000 | 1001 | 1001 | 1001 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |

(43) International Publication Date 23 October 2003 (23.10.2003)

PCT

(10) International Publication Number WO 2003/088568 A3

(51) International Patent Classification⁷: H04N 5/445

G06F 13/38,

(21) International Application Number:

PCT/US2003/010400

(22) International Filing Date:

4 April 2003 (04.04.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/371.983

12 April 2002 (12.04.2002) US

(71) Applicant (for all designated States except US): THOM-SON LICENSING S.A. [FR/FR]; 46, quai A. Le Gallo, F-92648 Boulogne (FR).

(72) Inventor; and

(75) Inventor/Applicant (for US only): PERDUE, Kenneth, Lee [US/US]; 1417 Carey Court, Carmel, IN 46032 (US). (74) Agents: TRIPOLI, Joseph, S. et al.; c/o Thomson Licensing Inc., Two Independence Way, Suite #2, Princeton, NJ 08540 (US).

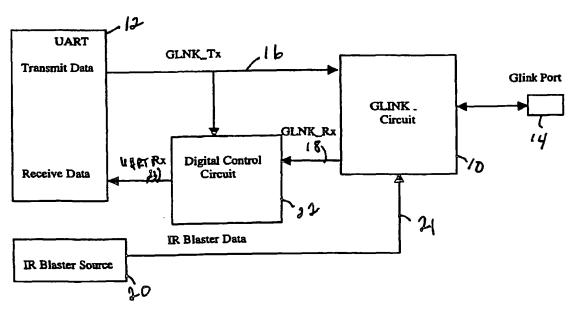
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report

[Continued on next page]

(54) Title: DIGITAL CONTROL CIRCUIT FOR SERIAL UART TRANSMISSIONS



(57) Abstract: A digital control circuit enables/disables the feedback of serial transmissions of an UART receive signal when the G-LINK output port is short circuited in a particular operational mode. In a conventional operational mode, the digital control circuit monitors the state of the UART's Tx output and during an UART transmission, the Rx line normally is used for data feedback to set to a high state and eliminate unnecessary or unwarranted UART interrupts generated by the G-LINK circuit. The digital control circuit thus enables the G-LINK signal feedback to the UART when required, thereby maintaining a functionality to identify the unit's operational mode and allows the serial ports of the G-LINK to be configured and utilized during conventional operational modes.





(88) Date of publication of the international search report: 15 January 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

Into ional Application No PCT/US 03/10400

A. CLASSII	FICATION OF SUBJECT MATTER								
IPC 7	G06F13/38 H04N5/445	•							
1		:							
According to	o International Patent Classification (IPC) or to both national classi	ification and IPC							
B. FIELDS SEARCHED									
	ccumentation searched (classification system followed by classific	ation symbols)							
IPC 7	G06F H04N								
<u> </u>		at analy decreased as the first transfer of the	nombod						
Documentat	tion searched other than minimum documentation to the extent that	at such gocuments are included in the fields se	ear c ned						
Electronic data base consulted during the international search (name of data base and, where practical, search terms used)									
EPO-In	ternal, WPI Data								
[
}									
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT								
Category °	Citation of document, with indication, where appropriate, of the	Relevant to claim No.							
 	 								
Α	US 5 862 354 A (ADAMS MATTHEW K	(ET AL)	1–20						
}	19 January 1999 (1999-01-19) column 1, line 251 -column 2, l	ine 7							
	column 2, line 48 -column 4, li								
1	abstract	· ·							
 	WO 01 02942 A (INDEX SYSTEMS IN	IC - KHAN	1–20						
A	ZAFAR) 11 January 2001 (2001-01		1 0						
	page 2, line 6 -page 4, line 21								
	page 13, line 1 -page 14, line	10							
}	abstract								
Α	WO 00 70867 A (INDEX SYSTEMS IN		1–20						
	STEPHEN R (US); KHAN ZAFAR (US)								
	D0) 23 November 2000 (2000-11-2 abstract	(3 <i>)</i>							
	page 3, line 1 -page 4, line 23	•							
 	<u> </u>								
Furt	ther documents are listed in the continuation of box C.	Patent family members are listed	in annex.						
° Special ca	ategories of cited documents:	"T" later document published after the inte	emational filing date						
"A" docume	ent defining the general state of the art which is not	or priority date and not in conflict with cited to understand the principle or th	the application but						
considered to be of particular relevance "E" earlier document but published on or after the international		invention "X" document of particular relevance; the	claimed invention						
filing date "L" document which may throw doubts on priority claim(s) or		cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone							
citatio	is cited to establish the publication date of another on or other special reason (as specified)	"Y" document of particular relevance; the considered to involve an in	ventive step when the						
	nent referring to an oral disclosure, use, exhibition or means	document is combined with one or me ments, such combination being obvio							
"P" docum	ent published prior to the International fillng date but than the priority date claimed	in the art. "&" document member of the same patent family							
	actual completion of the international search	Date of mailing of the International se	arch report						
,	.0 October 2003	17/10/2003							
Name and I	mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2	Authorized officer							
ľ	NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,	Nguyen Xuan Hiep,	C						
[Fax: (+31-70) 340-3016	Myuyen Auan niep,	,						

INTERNATIONAL SEARCH REPORT

mation on patent family members

Intermional Application No PCT/US_03/10400

Patent document cited in search report		blication date		Patent family member(s)	Publication date
US 5862354		19-01-1999	AU	2213597 A	22-09-1997
			CA	2247917 A1	12-09-1997
			CN	1212771 A	31-03-1999
			EP	0885419 A1	23-12-1998
			JP	2001508562 T	26-06-2001
			TR	9801740 T2	21-12-1998
			MO	9733232 A1	12-09-1997
WO 0102942	. A	11-01-2001	AU	763014 B2	10-07-2003
			ΑÜ	6206700 A	22-01-2001
			BR	0012738 A	18-06-2002
			CA	2378551 A1	11-01-2001
			CN	1369174 T	11-09-2002
			EP	1197084 A2	17-04-2002
			JP	2003507807 T	25-02-2003
		•	MO	0102942 A2	11-01-2001
WO 0070867	· A	23-11-2000	AU	4853400 A	05-12-2000
		_	CA	2371458 A1	23-11-2000
			CN	1355989 T	26-06-2002
			EP	1219111 A1	03-07-2002
			JP	2003518343 T	03-06-2003
			WO	0070867 A1	23-11-2000